

Go Fix It! – Energy Subsidy Reform

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When one contemplates sustainability problems, government subsidies probably don't come to mind and if perhaps they do, the elimination of such subsidies is probably not one's first thought. What could possibly be the logic behind this? Well, to start, the playing field needs to be leveled. While the idea of subsidy elimination is admittedly controversial, "this is certainly something where folks on both the left and right can find common ground. Let's start with subsidies for long-established fossil fuel industries like coal, oil, and natural gas. These entrenched industries simply don't need government handouts. The estimated \$3 billion or so in annual federal subsidies to these industries in the U.S. should be removed immediately" (Pernick & Wilder).

Following this thought, and building upon the argument against federal subsidies, Beyond Boom & Bust exemplifies the difference between past government-driven innovation and the government subsidies of today. "Unfortunately, clean tech deployment policies today often closely resemble crop supports, offering a flat production subsidy for any clean energy produced, rather than the demanding military procurement policies that delivered steady improvements and the eventual mass-adoption of everything from radios, microchips, and jet engines, to gas turbines, lasers, and computers" (Jenkins, et al). They proceed to point out that since the subsidy levels increase each year at the rate of inflation, thus keeping them constant in real dollar terms, there is no incentive for continual cost declines or pathway to eventual subsidy independence. Finally, it should be noted that federal subsidies have expiration dates and although they can be renewed, they periodically expire and as many of them are due to in the near future and as the federal government is continuing to spend at a rate much faster than it brings in revenue, it will be difficult to continue to provide such subsidies. Annual federal clean tech spending peaked in 2009 at \$44.3 billion and has already declined steadily through 2011 to \$30.7 billion. Yet the sharpest reductions in federal clean tech support are still ahead: unless Congress intervenes, clean tech spending will be cut nearly in half from 2011 to 2012 and will fall to just one-quarter of 2009 levels by 2014" (Jenkins, et al).

So what action should the United States take? One of the biggest and most impactful actions that can be taken is obviously the phasing out of subsidies. Deployment incentives should decline as technologies improve in price and performance to both conserve limited taxpayer and consumer resources and provide clear incentives for continued technology improvement until eventually the industry is subsidy independent. "Once all subsidies are phased out, the energy market can compete in a more open and transparent environment" (Pernick & Wilder). Furthermore, some of the money saved from ending the subsidies can be used to fund prizes for successful innovation. "Historically, governments have

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sponsored innovation contests, such as Britain's Longitude Prize and France's Food Preservation Prize. Although the U.S. government has tentatively followed industry into the prize arena, nearly all of its R&D spending is still distributed through traditional grant programs or competitively bid contracts” (Hintz). Unfortunately, in the case of current government grants and competitively bid contracts, researchers are paid upfront for their work, whether it pans out or not. This obviously leads to fiscal waste and a lack of incentive to continue improvement and work. With an inducement prize, the sponsor pays only for ideas that actually meet the prize criteria.

In conclusion, a combination of subsidy reduction and a refocusing of fiscal assets to the funding of prizes for successful innovation rather than a dishing out of taxpayer dollars to promises that need not pan out will allow the United States to continue to take the lead on driving innovation.

Bibliography:

Jenkins, Jesse, Mark Muro, Ted Nordhaus, Michael Shellenberger, Letha Tawney, and Alex Trembath. "Beyond Boom & Bust: Putting Clean Tech on a Path to Subsidy Independence" . Breakthrough Institute, Brookings Institution, World Resources Institute, April 2012. Web.
<http://thebreakthrough.org/blog/Beyond_Boom_and_Bust.pdf>.
Pernick, Ron, and Clint Wilder. *Clean Tech Nation: How the US Can Lead in the New Global Economy*. 1st Ed. New York, NY: HarperCollins, 2012. Print.
Hintz, Eric. "Creative Financing: Cash Prizes for Innovation are Surging." *Wall Street Journal*, 26 September 2010,
<<http://online.wsj.com/article/SB10001424052748704505804575483423120157674.html>>.

Detailed Annotations:

Jenkins, Jesse, Mark Muro, Ted Nordhaus, Michael Shellenberger, Letha Tawney, and Alex Trembath. "Beyond Boom & Bust: Putting Clean Tech on a Path to Subsidy Independence" . Breakthrough Institute, Brookings Institution, World Resources Institute, April 2012. Web.

2. Jenkins is the Director of Energy and Climate Policy, Breakthrough Institute, Muro is a Senior Fellow in the Metropolitan Policy Program, Brookings Institute, Nordhaus and Shellenberger are cofounders, Breakthrough Institute, Tawney is a Senior Associate, World Resources Institute, and Trembath is a Policy Associate, Breakthrough Institute.

3. Nearly all clean tech segments in the United States remain reliant on production and deployment subsidies or other supportive policies to gain an expanding foothold in today’s energy market. As many of these subsidies and policies are poised to expire, and additional government funds will be hard sought, moving away from subsidy dependence is crucial.

4. This report begins by documenting and analyzing federal clean tech spending in recent and future years and notes the concerns over the timeline on such spending. Secondly, the report breaks clean tech into segments and notes specifically how each is affected, and finally, it discusses how the US can move towards subsidy independence.
5. “In summary, this report finds that annual federal clean tech spending peaked in 2009 at \$44.3 billion and has already declined steadily through 2011 to \$30.7 billion. Yet the sharpest reductions in federal clean tech support are still ahead: unless Congress intervenes, clean tech spending will be cut nearly in half from 2011 to 2012 and will fall to just one-quarter of 2009 levels by 2014.” “Absent policy reform, several US clean tech segments will face new headwinds, making their market outlooks increasingly uncertain. This section examines the impact of expiring federal policies on wind, solar, and nuclear power, corn and cellulosic biofuels, and plug-in hybrid/electric vehicles and advanced batteries.” “With the US clean energy policy system set to be effectively wiped clean in the coming years, American business and policy makers must now unite to craft a coordinated new set of limited but direct federal strategies optimized to drive innovation and make clean energy subsidy independent over time.”
6. This report specifically focuses on (1) the dependence of clean tech on federal subsidy, and (2) the need to move away from it.
7. “Unfortunately, clean tech deployment policies today often closely resemble crop supports, offering a flat production subsidy for any clean energy produced, rather than the demanding military procurement policies that delivered steady improvements and the eventual mass-adoption of everything from radios, microchips, and jet engines, to gas turbines, lasers, and computers.” “Annual federal clean tech spending peaked in 2009 at \$44.3 billion and has already declined steadily through 2011 to \$30.7 billion. Yet the sharpest reductions in federal clean tech support are still ahead: unless Congress intervenes, clean tech spending will be cut nearly in half from 2011 to 2012 and will fall to just one-quarter of 2009 levels by 2014.”

Pernick, Ron, and Clint Wilder. *Clean Tech Nation: How the US Can Lead in the New Global Economy*. 1st Ed. New York, NY: HarperCollins, 2012. Print.

2. Rob Pernick is the Founder & Managing Director, Clean Edge, a clean-tech research and advisory firm. He’s also coauthored *The Clean Tech Revolution* (HarperCollins, 2007), more than two dozen reports on clean technologies, markets, and policies. He teaches MBA courses at Portland State University and New College, and is widely quoted in the media and at industry events in the US and abroad. Clint Wilder is Senior Editor, Clean Edge and also coauthored *The Clean Tech Revolution* with Pernick. He is notably an award-winning business journalist who has covered the high-tech and clean-tech industries since 1985.
3. Clean Tech focuses on how the United States can adjust its path and remain dominant in this revolution through the proposed action plan which includes ending all energy subsidies and creating a new breed of clean-tech investment tools modeled on the oil and gas industries.

4. The book first discusses how other countries are focused on clean tech versus the United States, then addresses what the US needs to address and finally concludes with how that can be achieved, mainly through the proposed action plan.

5. “It’s time to level the playing field and get rid of distorting energy subsidies.” “Once all subsidies are phased out, the energy market can compete in a more open and transparent environment.” “Let’s start with subsidies for long-established fossil fuel industries like coal, oil, and natural gas. These entrenched industries simply don’t need government handouts. The estimated \$3 billion or so in annual federal subsidies to these industries in the U.S. should be removed immediately. Over the next five to ten years, similar subsidy support should be phased out for renewables and nuclear power. For renewables, a five to ten year phase out makes sense since subsidies are meant to help support expansion of new, fledgling industries. And while the deployment of renewables in the U.S. has doubled over the past four years, they could use a final push. So for now, we should extend successful tools like the wind production tax credit, but have a clear plan to end them within a decade.”

6. This book elaborates on the reasons for why subsidy dependence must be eliminated, how to do that, and where to go afterwards.

7. “Let’s start with subsidies for long-established fossil fuel industries like coal, oil, and natural gas. These entrenched industries simply don’t need government handouts. The estimated \$3 billion or so in annual federal subsidies to these industries in the U.S. should be removed immediately.” “Once all subsidies are phased out, the energy market can compete in a more open and transparent environment”